

## **EXHIBIT 2**

```
#####
# Program: needle
# Rundate: Mon Jul 31 07:00:44 2006
# Align_format: srspair
# Report_file: /ebi/extserv/old-work/needle-20060731-07004323238664.output
#####

#####
# Aligned_sequences: 2
# 1: SEQ173
# 2: G_kaustophilus
# Matrix: EBLOSUM62
# Gap_penalty: 10.0
# Extend_penalty: 0.5
#
# Length: 1138
# Identity: 987/1138 (86.7%)
# Similarity: 987/1138 (86.7%)
# Gaps: 147/1138 (12.9%)
# Scsre: 5832.0
#
#####

=====
```

SEQ173	1	aattccgac	9
G_kaustophil	101	aactaacagcaaccgcctcgggagtaacgctgaccggaaggcgattccgac	150
SEQ173	10	atttcaattgaatcgtttattccgcttggaaaaagaaggcaagttgcttgt	59
G_kaustophil	151	atttcaattgaatcgtttattccgcttggaaaaagaaggcaagttgcttgt	200
SEQ173	60	tgtatgtggaaaagaccggggagcatcgtaactgcaggcgcttttcttg	109
G_kaustophil	201	tgcacgtggaaaagaccggggagcatcgtaactgcaggcgcttttcttg	250
SEQ173	110	aaatcgtggaaaactgcgcacaacacgggtggaaatcgaaacggaaagac	159
G_kaustophil	251	aaatcgtggaaaactgcgcacaacacgggtggaaatcgaaacggaaagac	300
SEQ173	160	aacttttgacgatcatccgctcgggcactcagaattccgcctcaatgg	209
G_kaustophil	301	aacttttgacgatcatccgctcgggcactcagaattccgcctcaatgg	350
SEQ173	210	gtttaaacgcgcgacgaaatatccgcgcctgcgcggaaattgtggaaaacg	259
G_kaustophil	351	gtttaaacgcgcgacgaaatatccgcgcctgcgcggaaattgtggaaaacg	400
SEQ173	260	tgtttcaatcccgctgatttattggggaaaaccgtgattccgcggaaacgg	309
G_kaustophil	401	tgtttcaatcccgctgatttattggggaaaaccgtgattccgcggaaacgg	450
SEQ173	310	ttcgcgcgtttctacatcgaaaacgcgcggccaaatcttgcacagggtgtcaactg	359
G_kaustophil	451	ttcgcgcgtttctacatcgaaaacgcgcggccaaatcttgcacagggtgtcaactg	500
SEQ173	360	gaaagggtgaacatggcgagcttgcacagcgaccgacagtcatcgct	409
G_kaustophil	501	gaaagggtgaacatggcgagcttgcacagcgaccgacagtcatcgct	550

SEQ173	410	tagccatgcgcaaagtgaaaatttagtcgaaaatgaagtatcatacaac	459
G_kaustophil	551	tagccatgcgcaaagtgaaaatttagtcgaaaatgaagtatcatacaac	600
SEQ173	460	gttgtcattccctggaaaaagtcttaatgagtcagcaaaattttggatga	509
G_kaustophil	601	gttgtcattccctggaaaaagtcttaatgagtcagcaaaattttggatga	650
SEQ173	510	cggcaaccaccgggtggacatcgtcatgacagccaatcaagtgtattta	559
G_kaustophil	651	cggcaaccaccgggtggacatcgtcatgacagccaatcaagtgtattta	700
SEQ173	560	aggccgagcaccccttcattttcccggtgttgcggcaactatccg	609
G_kaustophil	701	aggccgagcaccccttcattttcccggtgttgcggcaactatccg	750
SEQ173	610	gagacggcccgttattccaaacagaaagcaaaacgaccatgatcgtcaa	659
G_kaustophil	751	gagacggcccgttattccaaacagaaagcaaaacgaccatgatcgtcaa	800
SEQ173	660	tgcaaaaagagtttctgcaggcaatcgaccgagcgttgcgttgcgtcag	709
G_kaustophil	801	tacaaaagagtttctgcaggcaatcgaccgagcgttgcgttgcgtcag	850
SEQ173	710	aaggaaagaaacaacgttgtgaaactgacgacgttctggaggaatgctc	759
G_kaustophil	851	aaggaaagaaacaacgttgtgaaactaacgacgttctggaggaatgctc	900
SEQ173	760	gaaatttctcgatttctcc-gagatcgggaaagtgtacggaggcagctgca	808
G_kaustophil	901	gaaatttctcgatttctccggagatcgggaaagtgtacggaggcagctgca	950
SEQ173	809	aacggagtcttgaagggaaagagttgaacatttcgttcagcgcgaaat	858
G_kaustophil	951	aacggagtcttgaagggaaagagttgaacatttcgttcagcgcgaaat	1000
SEQ173	859	atatgatggacgcgttgcggcgttgcgtatggaaacagacatttcaaatcag	908
G_kaustophil	1001	atatgatggacgcgttgcggcgttgcgtatggaaacagaca-ttcaaatcag	1049
SEQ173	909	cttcaactggggcatgcggcgttctgttgcggccgcgttca-accgatt	957
G_kaustophil	1050	cttcaactggggcatgcggcgttctgttgcggccgcgttcataccgatt	1099
SEQ173	958	cgatgcttcagtcattttgcgggtgagaacatat	992
G_kaustophil	1100	cgatgcttcagtcattttgcgggtgagaacatattga	1137

```
#####
# Program: needle
# Rundate: Mon Jul 31 07:01:59 2006
# Align_format: srspair
# Report file: /ebi/extserv/old-work/needle-20060731-07015859433755.output
#####

#####
# Aligned_sequences: 2
# 1: SEQ173
# 2: B_cereus
# Matrix: EBLOSUM62
# Gap_penalty: 10.0
# Extend_penalty: 0.5
#
# Length: 1146
# Identity: 654/1146 (57.1%)
# Similarity: 654/1146 (57.1%)
# Gaps: 160/1146 (14.0%)
# Score: 3294.5
#
#####

SEQ173 1 aattccgac 9
.||.||.||.
B_cereus 101 aggtttagtacggaaqaaggatgtacattaacaggaagcgatgtat 150
.
SEQ173 10 atttcaattgaatcgttattccgcttggaaaagaaggcaagttgtcg 59
|||||.|||||||.||||.||..|||||.||.||.||.||....|||||
B_cereus 151 atttcgattgaatctttatcccgatgtgaaaggaggatggaaaagaaatcg 200
.
SEQ173 60 ttagtgtaaaagaccggggagcatcgtaactcgaggcgcttttctcg 109
.||.||.|||..||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_cereus 201 agaagtaaaacaatcaggaagtattgtttacaggcgaaatattttagtg 250
.
SEQ173 110 aaatcgtaaaaaactgccgcaacaacggtgaaatcgaaacggaaagac 159
||||.||.|||||||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_cereus 251 aaattgtaaaaaaaaattacctaagaaactgttagaaattctgtggaaaat 300
.
SEQ173 160 aacttttgcacgatcatcgctcgggcactcagaattccgcctcaatgg 209
.-.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_cereus 301 catttgcacaaaaataacttcgtggaaaatcagagttaatttaatgg 350
.
SEQ173 210 gctaaacgccgacgaaataccgcgcctgcgcgcaattgttagaaagaaaaacg 259
.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_cereus 351 ttttagattctgcacaaatccgtgttaccacaaattgttagaaacatcatg 400
.
SEQ173 260 tttttcaatcccgctgatattgtggaaaaccgtgattccgcggcaacggtg 309
.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_cereus 401 tttttaaaatcccaacggattacttaacatgtatcagacaaaactgt 450
.
SEQ173 310 ttccgcgttctacatcgaaacgcgcggcaatttgcacagggtgtcaactg 359
.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_cereus 451 ttccgcgttccactctgtggaaacaagaccgtatgtacagggtaaactg 500
.
SEQ173 360 gaaagtgttagacatggcgagcttgcacaggcgaccgacagtcgtcgt 409
.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_cereus 501 gaaaggatataaacagcgaactaacttgcattgtacagatagccacagg 550
```



```
#####
# Program:  needle
# Rundate:  Mon Jul 31 07:03:18 2006
# Align_format: srspair
# Report_file: /ebi/extserv/old-work/needle-20060731-07031637746308.output
#####

=====
#
# Aligned_sequences: 2
# 1: SEQ173
# 2: B_thuringiensis
# Matrix: EBLOSUM62
# Gap_penalty: 10.0
# Extend_penalty: 0.5
#
# Length: 1148
# Identity: 655/1148 (57.1%)
# Similarity: 655/1148 (57.1%)
# Gaps: 164/1148 (14.3%)
# Score: 3260.0
#
=====

SEQ173      1                               aattccgac      9
B_thuringiensis 101 aagttgtcgctacggaagaaggagttacattaacaggaaggcgatgtat 150
          .||.||.||.
SEQ173      10  atttcaattgaatcgtttattccgcttggaaaagaaggcaagttgctcg 59
          |||||.|||||||.|||||.||..|||||.||.||.||.||....|.||.
B_thuringiensis 151 atttcgattgaatctttatcccggttgaagaggatggaaaaggaaattgt 200
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
SEQ173      60  tgatgtgaaaagaccggggagcategtactgcaggcgcgcttttctcg 109
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_thuringiensis 201 agaagtaaaacaatcaggaagtattgtttacaggctaaatattttagtg 250
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
SEQ173      110 aaatcgtaaaaaactgcgcacaacacggggaa--tcgaaacggaaag 157
          |||||.||.|||||.||.|||||.||.|||||.||.|||||.||.||.||.||.
B_thuringiensis 251 aaattgtaaaaaaaaattgcgaaaactgttagaaatttc-tgtcgaaaa 299
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
SEQ173      158 acaacttttgcgatcatcgctcgccggcactcagaattccgcctcaat 207
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_thuringiensis 300 tcatttaatgcacaaaataacttctggaaatcagaatttaatttaat 348
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
SEQ173      208 gggctaaacgcgcgacgaaatccgcgttgcggcaattgtggaaaagaaaa 257
          ||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_thuringiensis 349 ggttttagattctgcagaatatccattgttaccacaaaattgtggaaaacatca 398
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
SEQ173      258 cgttttcaatcccggtgttattgtggaaaaccgtgattccggcaacgg 307
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_thuringiensis 399 tgtttttaagattccaaacagattacttaacatatgtcagacaaaactg 448
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
SEQ173      308 tggtcgccgttctacatcgaaacgcggccaaatcttgcacaggtgtcaac 357
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_thuringiensis 449 tatttgcagtctccacttctgtggaaaagaccaatcttgcacaggtgtaaac 498
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
SEQ173      358 tggaaaagtgtggcgagcttgcacagcgaccgacagtcatcg 407
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_thuringiensis 499 tggaaaggatataacagcgaaacttgcattgttgcacagatagtccacag 548
          .||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
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SEQ173	408 cttagccatgcgcaaagtgaaaattga--gtc-ggaaaatgaagtatcat ·     ..  .  .    .-          -.-  .      ..  .	454
B_thuringiens	549 gttagcttctgaaaaggcaaaaattgaaggattgttagatgaa-ttccag	597
SEQ173	455 acaac-gtctgtatccctggaaaaaggcttaatgacgtcagcaaaatttt ·   .   .   .   .   .        ..        ..        ..	503
B_thuringiens	598 gcaaatgttgttattccggggaaaagcttaatgaattaagcaaaaattct	647
SEQ173	504 ggatga--cggcaaccacccgggtggacatcgtcatgacagccaatcaagt ·      ..  .  .  ...   .       .   .  ...	551
B_thuringiens	648 agatgagtctgaag--aaatggtagatatcgttattacggagttcaagt	695
SEQ173	552 gctatttaaggccgagcaccttctttttccggctgtgacggca ..      ..  .  .  .  .       .  .  ...  .  .  .  .	601
B_thuringiens	696 attatccgtacaaaacatttattattcttctcaagattttagaa	745
SEQ173	602 actatccggagacggcccgcttgcattccaaacagaaaggcaaaacgaccatg ..     .  .  .  .  .  .       .  .       .  .  .  .	651
B_thuringiens	746 attatcctgatacaactcgatcaattcctgcagagatgtttcaagatatt	795
SEQ173	652 atcgtcaatgcääaaagagtttctgcaggcaatcgaccgagcgcttgc ..   .   .   ..   .  .  .   ..   .  .  .  .  .  .	701
B_thuringiens	796 ttgttaatacääaaagaattttacaagcaattgatcgtgcacatctctgtt	845
SEQ173	702 tgctcgagaaggaagaaacaacgttgtgaaactgacgacgcttcctggag ..     .   .   .  .  .   ..   .  .  .  .  .  .  .  .	751
B_thuringiens	846 agctagatgtgtataatgttgtgaaattatcaac-ttttagagcag	894
SEQ173	752 g-aatgctgcaaatttctcgatttctcc-gagatcggaaagt-gacgg ..     .   ..   .  .  .  .  .  .  .  .  .  .  .  .  .	798
B_thuringiens	895 gcaatgctgaaatttcttcgaattcaccagaaatcggaaagttagttaga	944
SEQ173	799 agcagctgcaaacggagtctcttgaaaggaaaggttgaacatttcgttc ..   .  .   ..  .  .  .  .  .  .  .  .  .  .  .  .  .	848
B_thuringiens	945 agaagt-caatgtgaaaagttagatggagaagagttaaaaatatcttt	993
SEQ173	849 agcgcgaaatatatgtatggacgcgttgcggcgcttgcgttgcacagacat ..   .  .   ..   .  .  .  .  .  .  .  .  .  .  .  .  .	898
B_thuringiens	994 agtgcääaatatatgtatggatgcactaaaggcatttagatgtactga-aa	1042
SEQ173	899 ttcaaattcagcttactggggccatggccgttgcgttgcgcggcgtt ..   .   .   .   .  .  .  .  .  .  .  .  .  .  .  .  .	948
B_thuringiens	1043 ttaagatttagcttactggagaatgagaccattcttaattcgtacggta	1092
SEQ173	949 ca-accgatcgatgttcagctatttgcgggtgagaacatatt ..  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .	992
B_thuringiens	1093 aatgatgaatccattattcaattaatttacgggttgtacttactaa	1140

```
#####
# Program: needle
# Rundate: Mon Jul 31 07:04:20 2006
# Align_format: srspair
# Report_file: /ebi/extserv/old-work/needle-20060731-07041940078774.output
#####

#####
# Aligned_sequences: 2
# 1: SEQ173
# 2: B_weihenstephanensis
# Matrix: EBLOSUM62
# Gap_penalty: 10.0
# Extend_penalty: 0.5
#
# Length: 1149
# Identity: 636/1149 (55.4%)
# Similarity: 636/1149 (55.4%)
# Gaps: 160/1149 (13.9%)
# Score: 3242.0
#
#=====
```

SEQ173	1	aattccgac ·  .·.	9
B_weihensteph	101	aagttagtcaactgaagaaggagttactttaacaggtagtgatgcagac	150
SEQ173	10	atttcaattgaatcgtttattccgctgaaaaagaaggcaaggtagtgcgt   .  .  .    .    .  .. .    .  .  .  .  .  .  .  .  .	59
B_weihensteph	151	atctctatcgaaatcatttatcccagtcgaagatgctggaaaagaaaattgt	200
SEQ173	60	tgtatgtaaaaagaccgggagcatcgtaactgcagcgcgcgttttctcg .    .    .  .  .  .  .  .  .  .  .  .  .  .  .  .  .	109
B_weihensteph	201	ggaaaattgaacaatcaggaagtattatttacaagcaaaatattttagtg	250
SEQ173	110	aaatcgtaaaaactgcgcacaacaacggtgaaatcgaaacggaaagac  .    .    .  .  .  .  .  .  .  .  .  .  .  .  .  .  .	159
B_weihensteph	251	agatcgtaaaaaattacctaaagaaactgtcgaaatttctgtggaaaat	300
SEQ173	160	aacttttgacgatcatccgcgtcggggcactcagaattccgcctcaatgg .    .    .  .  .  .  .  .  .  .  .  .  .  .  .  .  .	209
B_weihensteph	301	cattttatgacaaaaataaaatctggaaaatcagagttcaactaaatgg	350
SEQ173	210	gctaaacgcgcacgaataatccgcgcctgcggcaattgaagaagaaaacg ..  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .	259
B_weihensteph	351	tttagatgctgtgaatattcggttattaccacaaaatcgaagaacatcatg	400
SEQ173	260	tgtttcaaatccgggtgatatttattgaaaaccgtgattcggcaaacggtg .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .	309
B_weihensteph	401	tatataagattccaacagattactaaagcacatgattcgtcaaacagta	450
SEQ173	310	ttcgcgcgtttcacatcgaaaacgcgcacaaatcttgcacagggtgtcaactg   .  .    .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .	359
B_weihensteph	451	tttgcagttcaagttctgaaaacaagaccgatcttgcacagggtgtaaactg	500

SEQ173	360	gaaagtgaacatggcagcttgtctgcacagcgaccgacagtcatcgct	409
B_weihensteph	501	gaaggtatataacagcgagcttaacttgtattgcaacagatagtacagac	550
SEQ173	410	tagccatgcgcaaagtgaaaattga---gtcgaaaaatgaag----tat	451
B_weihensteph	551	tagacttcgtaaagcaaaaatcgsagggtataatattgccatgtaaattt	600
SEQ173	452	catac-aacgtcgcatccctggaaaaagtcttaatgagctcagcaaaat	500
B_weihensteph	601	caagcgaatgtcgatttccctgttaagagcttaagtgaattaaatgtaaat	650
SEQ173	501	tttggatga--cggcaaccacccgggtggacatgtcatgacagccaatca	548
B_weihensteph	651	tctagatgaatctgaag--aaatggtagatatcgttattacggatgtatca	698
SEQ173	549	agtgttatttaaggccgagcacctttctttccoggctgtacgt	598
B_weihensteph	699	agtattattccgtacaaaacatttattattcttcgtcaagattatgtaaag	748
SEQ173	599	gcaactatccggagacqgcccgttattccaaacagaaagcaaaacgaco	648
B_weihensteph	749	gaaattatccagatacaacgcgtttaattccagctgaaatgtaaactgtat	798
SEQ173	649	atgatcgtaatgcaaaagagttctgcaggcaatcgaccgagcgttctt	698
B_weihensteph	799	atatttgtaaataaaaaaaattttacaaggcattgtatcgatcgatcgat	848
SEQ173	699	gcttgcgcgagaaggaaacaacgttgcgttgcgcgttcttgc	748
B_weihensteph	849	gttagcaagagatggcgttacaacgttgcgttgcgcgttgcgcgttgc	898
SEQ173	749	gaggaatgcgtcaaatttctcgatttctcc-gagatcgggaaagtgcgt	797
B_weihensteph	899	aacagatgttagagatttctcgatgtcaccagaaatcgaaaaatgtaa	948
SEQ173	798	gagcagctgcaaacggagttcttgcggaaagatgttgcgttgcgcgttgc	847
B_weihensteph	949	gaagagggttcaatgtgaaaatgttagatggagaagaattaaaaatatcttt	998
SEQ173	848	cagcgcgaaatataatgtggacgcgttgcggcgttgcgttgcgcgttgc	897
B_weihensteph	999	tagtgcaaaatataatgtggacgcattaaaggcttgcgttgcgcgttgc	1047
SEQ173	898	tttcaaatcagttcaactggggccatgcggcgttgcgttgcgcgttgc	947
B_weihensteph	1048	attaaatgttagtttactggagcgttgcgttgcgttgcgttgcgttgc	1097
SEQ173	948	tca-accgattcgatgttcaactttgcgggtgagaacatata	992
B_weihensteph	1098	aatgtatgttgcgttgcgttgcgttgcgttgcgttgcgttgcgttgcgttgc	1146

```
#####
# Program: needle
# Rundate: Mon Jul 31 07:06:37 2006
# Align_format: srspair
# Report_file: /ebi/extserv/cld-work/needle-20060731-07063643205179.output
#####

=====
#
# Aligned_sequences: 2
# 1: SEQ173
# 2: B_subtilis
# Matrix: EBLOSUM62
# Gap_penalty: 10.0
# Extend_penalty: 0.5
#
# Length: 1145
# Identity: 682/1145 (59.6%)
# Similarity: 682/1145 (59.6%)
# Gaps: 161/1145 (14.1%)
# Score: 3577.5
#
=====

SEQ173      1          aattccgac  9
              .|.||.||.
B_subtilis 101 aaattgttgcatacgatgatggagtatccttacagggagtgactcagat 150
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
SEQ173      10 atttcaattgaatcgtttattccgcttggaaaagaaggcaagttgctcg 59
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
B_subtilis 151 atttctattgaatccttcatcggaaaagaaggagataaagaaaatcg 200
              151 atttctattgaatccttcatcggaaaagaaggagataaagaaaatcg 200
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
SEQ173      60 tgatg-tgaaaagaccggggagcatcgtaactgcaggcgcgctttct 108
              ...|.|||..|||..||.||.|||||||.||.|||..||.|||..||.||.||.||.
B_subtilis 201 cactattgaacagccc-ggaagcatcgtttacaggctcgcttttagt 249
              201 cactattgaacagccc-ggaagcatcgtttacaggctcgcttttagt 249
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
SEQ173      109 gaaatcgtgaaaaaactgccgcacaaaacggtgaaatcgaa-acggaag 157
              |||||.||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.
B_subtilis 250 gaaatgtaaaaaaattgccatggcaactgttagaaattgaagtccaaaa 299
              250 gaaatgtaaaaaaattgccatggcaactgttagaaattgaagtccaaaa 299
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
SEQ173      158 acaacttttgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 207
              -|||.||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.
B_subtilis 300 tcag-tatgcgcattatccgttctggtaaagctgaatttaatctaaac 348
              300 tcag-tatgcgcattatccgttctggtaaagctgaatttaatctaaac 348
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
SEQ173      208 gggctaaacgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 257
              ||.||..||.||.||.|||||||.||.|||||...||.|||.||.||.||.||.||.
B_subtilis 349 ggactggatgtatgcgcacttgcgcgcgcgcgcgcgcgcgcgcgc 398
              349 ggactggatgtatgcgcacttgcgcgcgcgcgcgcgcgcgcgcgcgc 398
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
SEQ173      258 cgtgtttcaatcccgctgatttattggaaaaccgtgattcggcaaacgg 307
              .|||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_subtilis 399 tgcgattcagatcccaactgattgttaaaaatctaattcagacaaacag 448
              399 tgcgattcagatcccaactgattgttaaaaatctaattcagacaaacag 448
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
SEQ173      308 tggaaatgttgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 357
              ||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_subtilis 449 tatttgcgtgtccacctcagaaaacacgcgcgcgcgcgcgcgc 498
              449 tatttgcgtgtccacctcagaaaacacgcgcgcgcgcgcgcgcgc 498
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
SEQ173      358 tggaaatgttgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 407
              ||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.||.
B_subtilis 499 tggaaatgttgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 548
              499 tggaaatgttgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 548
              |||||.|||||||.||.|||||...||.|||.||.||.||.||.||.||.||.||.
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SEQ173	408	cttagccatgccaaagtggaaaattgagtcggaaaatgaagtatcataca	457
B_subtilis	549	tcttcattaaagaaaaggcgaaacttgcataattccagaagacagatcttata	598
SEQ173	458	acgtcgtcatccctggaaaaggcttaatgagctcagcaaaatttggat	507
B_subtilis	599	acgtcgtgattccggaaaaggtaactgcactcagaacatgttagat	648
SEQ173	508	gacggcaaccaccccggtggacatcgcatgcacagccaaatcaagtcatt	557
B_subtilis	649	gacaaccaggaaacttgcatacgcacagaaacccaaagtctgttt	698
SEQ173	558	taaggccgagcacccttc-ttctttcccgctgttgcacggcaactat	606
B_subtilis	699	taaag-cgaaaaaacgtcttgcattcgcacggcattctggacggaaattat	747
SEQ173	607	coggagacggcccgcttgattccaaacagaaagccaaacgaccatgatcgt	656
B_subtilis	748	ccagacacaaccaggcctgattccgcacagacagccaaacagaaatcattgt	797
SEQ173	657	caatgcaaaagagttctgcaggcaatcgaccgagcgtcttgcattgtc	706
B_subtilis	798	gaacacaaaagaattccctcaggcattgcattgtgcacatcttttagcta	847
SEQ173	707	gagaaggaaggaacaacgttgcggaaactgacgacgcgttctggaggaatg	756
B_subtilis	848	gagaggacgcacaaacgttgcattgtgcacatgtccgcacaaacd-ggctgaatc	896
SEQ173	757	c-tcgaaaatttcttcgattttcgc-gagatcgggaaag-tgacggacag	803
B_subtilis	897	cattgaaatttcttccaaattcgccagaaatcggtaaaatgtgtggaaacaa	946
SEQ173	804	ctgcaaacggagtcttgcggggaaagagttgcacatttcgttcagcgc	853
B_subtilis	947	ttg-ttgcggatcaaattgcggatggaaatataatcttttagtcc	995
SEQ173	854	gaaatataatgatggacgcgttgcggcgctgtatggaaacagacattcaa	903
B_subtilis	996	aaaatataatgtggatgcactaaagggtcttgcaggaggcaga-aatacgc	1044
SEQ173	904	atcagttcaactggggccatgcggcggttgcggccgttgcacacc	953
B_subtilis	1045	gttagttcacaggcgcataatgcggatccattttatcgacgc--cgat	1092
SEQ173	954	gat---tcgatgttgcgttgcgttgcgggtgagaacatata	992
B_subtilis	1093	gatggaaaacgttgcacagttatcccttgcgtcaaaaacattaa	1137



SEQ173	403	catcgcttagccatgcgcaaaagtggaaatggaa--aatgaagt       . . .    .    .    .. . .    .  .    .	449
B_licheniform	544	catc----gtcttcgcctaag-gaaagctaaagctcgacattaaacgaa	587
SEQ173	450	---atcatacacaacgtcgtcateccctggaaaaaggcttaatgagctcagca -      .    .      .      .      .    .    .    .	496
B_licheniform	588	cagttcatacataatgtcgatcccaggaaaaagcttaaccgagctcagca	637
SEQ173	497	aaattttggatgacggcaacc--acccgggtggacatcgatgacagcca       . . .      . . .    .    .    .    .    .    .	544
B_licheniform	638	aaatccttgatgac--catcaggagcttggatattgtgattaccgaaa	685
SEQ173	545	atcaagtgtatattaaggccgaggcaccttcattttttccggctgttt ..      .    .    .    .    .    .    .    .    .    .	594
B_licheniform	686	cacaagtgtttaaaaacaaaaacgttctgttttctccaggcttctt	735
SEQ173	595	gacggcaactatccggagacggcccgttattccaaacagaaagcaaaac       .    .    .    .    .    .    .    .    .    .	644
B_licheniform	736	gacggaaaactatccggatacgaacegcctgattcctcagaaagcaaaac	785
SEQ173	645	gaccatgatcgtaatgcaaaaaggtttctcgaggcaatcgaccgagcgt     . . .      . . .    .    .    .    .    .    .    .	694
B_licheniform	786	gaacttggattgtcaataactaaggatattctccaggcgatcgacaggcctt	835
SEQ173	695	ccttgctt---gctcgagaaggaaacaacgttggtaactgacgacg   .    .    .    .    .    .    .    .    .    .    .    .	741
B_licheniform	836	c---gcttttggagagaaggacgaaacaacgttggtaactttc--cg	880
SEQ173	742	cttc--ctggaggaaatgtcgaaatttctcgatattctcc-gagatcggg  ..  . .... .... .      .    .    .    .    .    .    .	788
B_licheniform	881	cagccgccaatgagtcgatcgaaatttctcaaactctccggaaatoggaa	930
SEQ173	789	aaag-tgacggaggcagctgcaaaacggagtctttgaaggggaagagttga     . .. . ..  .    .    .    .    .    .    .    .    .	837
B_licheniform	931	aagggttgtgaaacgg-tgaatgccgagcagatcgaagggaaagacttaaa	979
SEQ173	838	acatttcgttcagcgcgaaatataatgtatggacgcgttgcgggcgttgc   .    .    .    .    .    .    .    .    .    .    .    .	887
B_licheniform	980	agatatcctttatgtccgaaatataatgtggatgccttaaagttttgaa	1029
SEQ173	888	ggaaacagacatttcaaattcagcttcaactggggccatgcggccgttctgt       .    .    .    .    .    .    .    .    .    .    .	937
B_licheniform	1030	ggagaggaca-ttcatgtaaagcttcacaggcgctatgaggcctttctgaa	1078
SEQ173	938	tgcggccgcttcaa---ccgatcgatgttcagctatgttgcgggtga   .    .    .    .    .    .    .    .    .    .    .    .	984
B_licheniform	1079	tccgtacgc--cgaatgacgatcgatgtccaaattttctgtcc	1126
SEQ173	985	gaacatat 992   .    .	
B_licheniform	1127	ggacgtattaa 1137	